

Jeopardy Assessment

Proposed Incidental Take Permit: Morrissey Dam Rehabilitation Project (ITP 304)

Species: Eastern Massasauga and Queensnake

Location: Walworth County

Note: Because this species is state listed as well as federally listed, the U.S. Fish and Wildlife Service has been consulting on the project.

Background

Project Information

This project involves completing repairs to the dam to keep it operating safely. Specific repairs include replacement of the stop logs, removal of a concrete wall from within the auxiliary spillway, replacement of the railing, clearing shrubs and trees from the earth embankment, seeding and mulching the cleared areas, and replacing the existing fence with 6-foot tall chainlink.

Species Information

Eastern massasaugas (*Sistrurus catenatus*) are a State Endangered Species and a Federally Threatened Species. This rattlesnake is strongly associated with floodplain habitats along medium to large rivers, especially near river confluences, where they primarily occupy open canopy wetlands, such as sedge meadows, fresh wet meadows, shrub-carr and adjacent upland prairies, floodplain forests and old fields. Overwintering usually occurs in terrestrial crayfish burrows or rotted out root channels in open canopy wetlands, shrub-carr and lowland hardwood forests. Massasaugas begin to emerge in spring, usually in early April when soil temperatures average 50° F, at 15 cm depth, within overwintering habitats. They can remain active until mid-November, depending on air temperatures. This species breeds primarily in August and females give birth in late July or August the following year.

Queensnakes (*Regina septemvittata*), listed as Endangered in Wisconsin, prefer clear warm-water streams and small rivers. This crayfish specialist is typically associated with moderate to fast water flows and rocky substrates. They also utilize shoreline habitats for basking. This species overwinters in crayfish burrows but also in artificial structures such as cracked bridge abutments, old dams and seawalls. Queensnakes are active from early April through October and breed mid-May through mid-June. Live young are born in August or early September.

Conservation Measures

1. The U.S. Fish and Wildlife Service recommends, but does not require, that coverboard surveys be completed three weeks prior to starting construction. The Wisconsin DNR recommends, but does not require these surveys as well.
2. Queensnakes like to bask in trees and shrubs along the stream banks. Ten feet of shoreline parallel to the stream banks will be left uncleared to provide basking habitat for the queensnake. While additional trees and shrubs would be beneficial, typically only 5 feet of dam shoreline is left unmanicured. The distance at this site was expanded to accommodate the snakes while still maintaining the integrity of the dam.

3. When soil disturbance occurs or when vegetation is cut, removed, etc., the workspace will be cleared by the environmental monitor at the beginning of each work day. These walk-throughs will be reported to Endangered Resources Review Program (DNRRERReview@wi.gov) on a weekly basis.
4. The environmental monitor must have field experience with the massasauga and queensnake and their habitat and possess a valid Endangered/Threatened (E/T) Permit or similar authorization for massasauga removals.
5. The cracked concrete slab will be left in place as potential snake habitat.
6. Any Massasauga or Queensnake observed in the disturbance footprint will immediately be removed from the area. All individuals removed will be recorded (total number of each species and date removed) and reported to the Endangered Resources Review Program (DNRRERReview@wi.gov) at the conclusion of the project.
7. All dead Massasauga and queensnake found on site throughout the course of the project must be recorded (species, approximate age, possible cause of death), photographed, and reported to the Endangered Resources Review Program (DNRRERReview@wi.gov) at the conclusion of the project.
8. Erosion control will be implemented according to DNR stormwater protocols. Erosion control mats that are used must contain biodegradable thread and netting with the “leno” or “gauze” weave (contains strands that are able to move independently).
9. Upon completion of the project, all areas of temporary disturbance will be restored to pre-existing (or better) conditions. Areas that are cleared as part of the construction will be seeded and mulched.
10. Project related activities must occur from May 1 – September 30 and during average daytime temperatures of >65° F, when massasaugas and queensnakes have the best opportunity to move out of harm’s way. Also the ground temperature must be greater than 50° F.
11. Due to the potential for injury associated with project related work, contact information for a wildlife rehabilitator (<http://dnr.wi.gov/topic/wildlifehabitat/directory.html>) or veterinarian will be compiled, prior to the project start date, for consultation if any injured snakes are encountered.

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The proposed activity will minimize and mitigate impacts to the eastern massasauga and queensnake and as a result, we anticipate that take of these species will be low. The department has determined that the proposed activity is not likely to appreciably reduce the likelihood of the survival or recovery of the eastern massasauga and queensnake within the state, the whole plant-animal community of which they are a part or the habitat that is critical to their existence.